

Sequence ID No. / ID	NCBI Entrez Database	Name	Abbreviation
1. Coding sequence	XM_031289	Interleukin 8	IL8
2. Coding sequence	XM_051900	Prostaglandin-endoperoxide synthase 2	PTGS2
3. Coding sequence	M94582	Interleukin 8 receptor B	ILR8RB
4. Coding sequence	NM_005555	Lipocalin 2	LCN2
5. Coding sequence	NM_000331	Serum amyloid A1	SAA1
6. Coding sequence	NM_000757	Macrophage colony stimulating factor 1	CSF1 (MCSF1)
7. Coding sequence	X54489	Melanoma growth stimulatory activity	MGSA
8. Coding sequence	NM_002090	Chemokine (C-X-C motif) ligand 3	CXCL3
9. Coding sequence	XM_032429	Secreted phosphoprotein 1	SPP1 (OPN)
10. Coding sequence	M64349	Cyclin D	CCND1
11. Coding sequence	AX057136	c-Myc	c-Myc
12. Coding sequence	L25610	Cyclin-dependent kinase inhibitor	HUMCDK1
13. Coding sequence	BC021998	Cyclin-dependent kinase inhibitor 2A	CDKN2A
14. Coding sequence	NM_058195	Alternative reading frame p14	CDKN2A
15. Coding sequence	NM_005036	Peroxisome proliferative activated receptor, alpha	PPARA
16. Coding sequence	XM_003059	Peroxisome proliferative activated receptor, gamma	PPARG
17. Coding sequence	NM_006238	Peroxisome proliferative activated receptor, delta	PPARD
18. Coding sequence	XM_030326	CD44 antigen	CD44
19. Coding sequence	XM_044882	Prostaglandin-endoperoxide synthase 1	PTGS1
20. Coding sequence	NM_002131	High-mobility group AT-hook 1 isoform B	HMGAI
21. Coding sequence	X54942	CKSHS2	CKSHS2
22. Coding sequence	U22055	100 kDa coactivator	p100 coactivator
23. Protein	XP_031289	Interleukin 8	IL8
24. Protein	XP_051900	Prostaglandin-endoperoxide synthase 2	COX2
25. Protein	AAA36108	Interleukin 8 receptor B	CXCR2
26. Protein	NP_005555	Lipocalin 2	LCN2
27. Protein	NP_000331	Serum amyloid A1	SAA1
28. Protein	NP_000757	Macrophage colony stimulating factor 1	MCSF1
29. Protein	CAA38361	Melanoma growth stimulatory activity	Groa
30. Protein	NM_002090	Chemokine (C-X-C motif) ligand 3	Groy

Sequence ID No. / ID	NCBI Entrez Database	Name	Abbreviation
31. Protein	XP_032429	Osteopontin	OPN
32. Protein	AAA52136	Cyclin D	cyclin D1
33. Protein	CAC22425	c-Myc	c-Myc
34. Protein	AAA16109	Cyclin-dependent kinase inhibitor	p21
35. Protein	AAH21998	Cyclin-dependent kinase inhibitor 2A	p16
36. Protein	NP_047862	Alternative reading frame p14	p14ARF
37. Protein	NP_005027	Peroxisome proliferative activated receptor, alpha	PPAR $\alpha$
38. Protein	XP_003059	Peroxisome proliferative activated receptor, gamma	PPAR $\gamma$
39. Protein	NP_006229	Peroxisome proliferative activated receptor, delta	PPAR $\delta$
40. Protein	XP_030326	CD44 antigen	CD44
41. Protein	XP_044882	Prostaglandin-endoperoxide synthase 1	COX1
42. Protein	NP_002122	High-mobility group AT-hook1 isoform B	HYGY1
43. Protein	CAA38703	CKS1 protein homolog	CKS1
44. Protein	AAA80488	100 kDa coactivator	p100 coactivator
45. Forward primer		Interleukin 8	IL8
46. Reverse primer		Prostaglandin-endoperoxide synthase 2	PTGS2
47. Forward primer		Interleukin 8 receptor B	ILR8RB
48. Reverse primer		Lipocalin 2	LCN2
49. Forward primer		Serum amyloid A1	SAA1
50. Reverse primer		Macrophage colony stimulating factor 1	CSF1 (MCSF1)
51. Forward primer		Melanoma growth stimulatory activity	MGSA
52. Reverse primer		Chemokine (C-X-C motif) ligand 3	MGSA
53. Forward primer			
54. Reverse primer			
55. Forward primer			
56. Reverse primer			
57. Forward primer			
58. Reverse primer			
59. Forward primer			
60. Reverse primer			

Sequence ID No. / ID	NCBI Entrez Database	Name	Abbreviation
61. Forward primer		Secreted phosphoprotein 1	SPP1 (OPN)
62. Reverse primer			
63. Forward primer	Cyclin D	Cyclin D	CCND1
64. Reverse primer			
65. Forward primer	c-Myc	c-Myc	
66. Reverse primer			
67. Forward primer	Cyclin-dependent kinase inhibitor	HUMCDK1	
68. Reverse primer			
69. Forward primer	Cyclin-dependent kinase inhibitor 2A	CDKN2A	
70. Reverse primer			
71. Forward primer	Alternative reading frame p14	CDKN2A	
72. Reverse primer			
73. Forward primer	Peroxisome proliferative activated receptor, alpha	PPAR $\alpha$	
74. Reverse primer			
75. Forward primer	Peroxisome proliferative activated receptor, gamma	PPAR $\gamma$	
76. Reverse primer			
77. Forward primer	Peroxisome proliferative activated receptor, delta	PPAR $\delta$	
78. Reverse primer			
79. Forward primer	CD44 antigen	CD44	
80. Reverse primer			
81. Forward primer	Prostaglandin-endoperoxide synthase 1	COX1	
82. Reverse primer			
83. Forward primer	High-mobility group AT-hook 1 isoform B	HMGY1	
84. Reverse primer			
85. Forward primer	CKS1 protein homolog	CKS1	
86. Reverse primer			
87. Forward primer	100 kDa coactivator	p100 coactivator	
88. Reverse primer			

Relative Gene Expression Levels in Colon Polyps (Average  $\pm$  SE)

No.	Genes	Wild-Type Littermate	Individual Poly	P Value
1	SDF-1	1.23 $\pm$ 0.34	11.02 $\pm$ 2.45	0.003
2	COX2	1.41 $\pm$ 0.25	87.48 $\pm$ 16.50	<0.001
3	CXCR2	1.41 $\pm$ 0.35	11221 $\pm$ 23.76	<0.001
4	OPN	1.62 $\pm$ 0.60	463.37 $\pm$ 130.49	0.004
5	MCSFI	1.05 $\pm$ 0.15	4.26 $\pm$ 1.60	0.08
6	PPAR $\delta$	1.16 $\pm$ 0.27	0.44 $\pm$ 0.05	0.04

**FIG. 2A**

## Relative Gene Expressions in Normal-Appearing Mucosa from Colon Cancer

	Sigmoid and Rectum					Ascending Colon				
	NB	H002	H004	H006	H008	H011	NB	H003	H009	H010
IL-8	1.80 $\pm$ 0.26	28.91	7.14	6.88	18.35	24.67	1.72 $\pm$ 0.35	16.03	4.90	28.26
COX2	1.85 $\pm$ 0.29	13.54	10.34	18.23	14.63	1.87	1.74 $\pm$ 0.45	25.48	11.98	33.06
CXCR2	1.31 $\pm$ 0.14	11.35	6.82	6.85	7.18	100.20	1.26 $\pm$ 0.17	10.23	22.62	11.20
OPN	2.11 $\pm$ 0.52	10.85	9.84	11.88	21.29	3.41	1.43 $\pm$ 0.20	26.83	23.97	64.13
MCSF1	1.69 $\pm$ 0.19	4.49	11.88	12.84	7.24	7.98	1.57 $\pm$ 0.22	12.40	17.89	14.97
PPAR- $\delta$	1.14 $\pm$ 0.07	0.10	0.09	0.12	1.28	0.96	1.16 $\pm$ 0.11	0.09	1.10	0.30

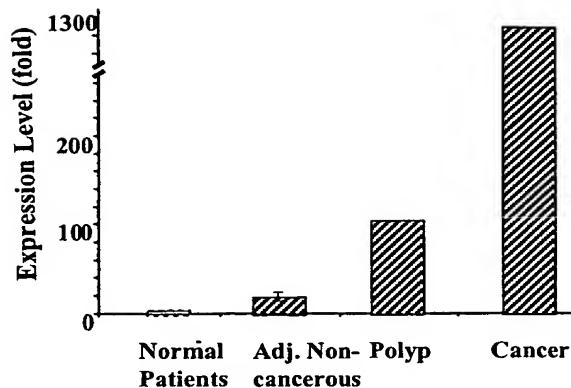
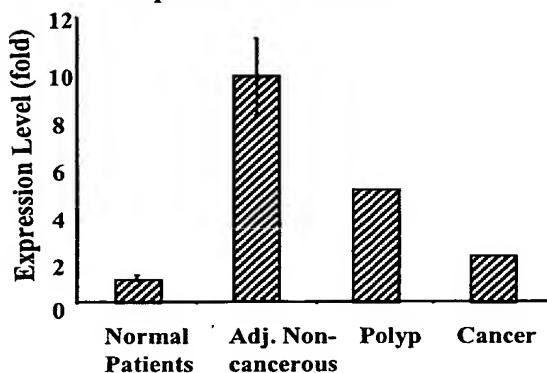
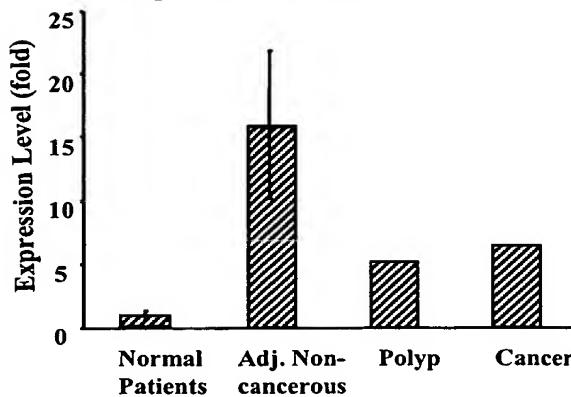
**FIG. 2B**

*Dependent Variable:* IL-8, M-CSF-1, COX-2, OPN, p21, PPAR- $\gamma$ , CXCR2, CD44, PPAR- $\delta$

*Results for Multivariate Analysis: Wilks Lambda Criterion*

Source	Lambda	probability
Cancer	0.989	0.0086

**FIG. 2C**

**Expression of IL-8****Fig. 3A****Expression of CXCR2****Fig. 3B****Expression of COX-2****Fig. 3C**

IL-8

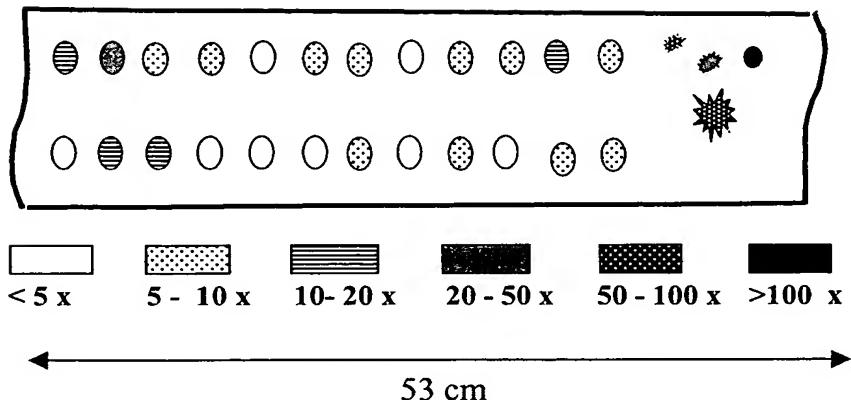


Fig. 4A

COX2

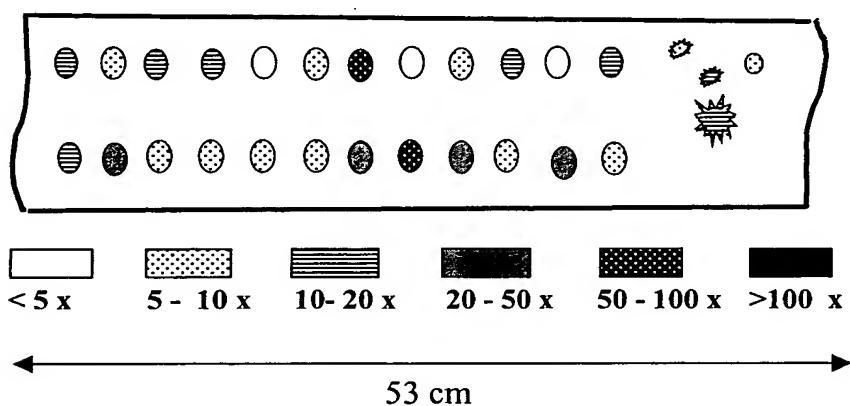


Fig. 4B

CXCR2

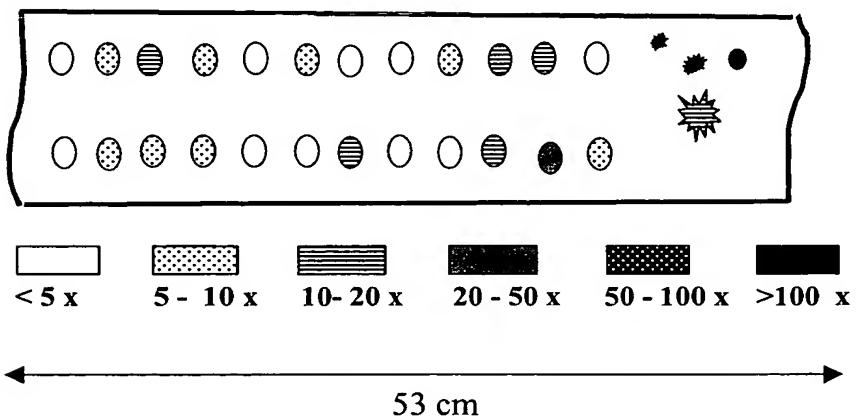


Fig. 4C